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Serial No.: 10/083,718
Filed: February 26, 2002
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CLAIM AMENDMENTS

A listing of an entire set of claims 1-40 is submitted herewith per 37 CFR §1.121 to replace all prior versions, and listings, of claims in the application. This listing of claims 1-40 includes (1) a cancellation of claims 1-20 herein without prejudice or disclaimer to the subject matter of cancelled claims 1-20, and (2) an addition of new claims 21-40

21. (New) An antenna, comprising:
a substrate of dielectric material; and
a plurality of electrically conductive elements disposed on a surface of the substrate to form a Yagi-Uda dipole array,
wherein the Yagi-Uda dipole array includes a driven element and at least one parasitic element, and
wherein the driven element is separate and distinct from the at least one parasitic element.
22. (New) The antenna of claim 21, wherein electromagnetic energy is coupled from the driven element to one or more of the at least one parasitic element through space and by surface waves in the substrate.
23. (New) The antenna of claim 22, wherein the driven element includes a first dipole element and a second dipole element extending colinearly in opposite directions from and perpendicular to a longitudinal axis of the substrate.
24. (New) The antenna of claim 23, wherein the first dipole element and the second dipole element have adjacent ends spaced apart at equal distances on either side of the longitudinal axis of the substrate.

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25. (New) The antenna of claim 21, wherein the at least one parasitic element includes a reflector and at least one director.
26. (New) The antenna of claim 25,
wherein the reflector is disposed on a first side of the driven element; and
wherein each director is disposed on a second side of the driven element.
27. (New) The antenna of claim 25,
wherein the reflector extends linearly across a longitudinal axis of the substrate.
28. (New) The antenna of claim 25,
wherein the reflector is centered upon a longitudinal axis of the substrate.
29. (New) The antenna of claim 25,
wherein the reflector is perpendicular to a longitudinal axis of the substrate.
30. (New) The antenna of claim 25,
wherein a first director of the at least one director extends linearly across a longitudinal axis of the substrate.
31. (New) The antenna of claim 25,
wherein a first director of the at least one director is centered upon a longitudinal axis of the substrate.
32. (New) The antenna of claim 25,

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wherein a first director of the at least one director is perpendicular to a longitudinal axis of the substrate.

33. (New) The antenna of claim 21,
wherein the driven element and the at least one parasitic element facilitate a broadcast by the antenna of a signal having a free space wavelength.

34. (New) An apparatus, comprising:
an antenna support; and
an antenna mounted on the antenna support, the antenna including
a substrate of dielectric material, and
a plurality of electrically conductive elements disposed on a surface of the substrate to form a Yagi-Uda dipole array,
wherein the Yagi-Uda dipole array includes a driven element and at least one parasitic element, and
wherein the driven element is separate and distinct from the at least one parasitic element.

35. (New) The apparatus of claim 34, wherein electromagnetic energy is coupled from the driven element to one or more of the at least one parasitic element through space and by surface waves in the substrate.

36. (New) The apparatus of claim 34, wherein the driven element includes a first dipole element and a second dipole element extending colinearly in opposite directions from and perpendicular to a longitudinal axis of the substrate.

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37. (New) The apparatus of claim 36, wherein the first dipole element and the second dipole element have adjacent ends spaced apart at equal distances on either side of the longitudinal axis of the substrate.
38. (New) The apparatus of claim 34, wherein the at least one parasitic element includes a reflector and at least one director.
39. (New) The apparatus of claim 38,
wherein the reflector is disposed on a first side of the driven element; and
wherein each director is disposed on a second side of the driven element.
40. (New) The antenna of claim 34,
wherein the driven element and the at least one parasitic element facilitate a broadcast by the antenna of a signal having a free space wavelength.

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an antenna mounted on the antenna support, the antenna including
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wherein the Yagi-Uda dipole array includes a driven element and at least one parasitic element, and
wherein the driven element is separate and distinct from the at least one parasitic element.

35. (New) The apparatus of claim 34, wherein electromagnetic energy is coupled from the driven element to one or more of the at least one parasitic element through space and by surface waves in the substrate.

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